Innovations in Risk Assessment: Improving Data Resources

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Innovations in Risk Assessment

- National Center for Environmental Assessment (NCEA)
 - Hazard & Risk Assessment arm for EPA
 - Interface between ORD Labs and Program Offices
 - Home for the IRIS program
- Innovation
 - Development/Improvement in Risk Assessment Methods
 - Use of "Sound Science"

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Improving Data Resources

- How do we use "Existing Data"
 - More can be done with what we have
 - Analytical methods are improving
- Computational Toxicology Workshop (September 2003)
 - New technologies are data-intensive
 - Genomics = Sporty new car



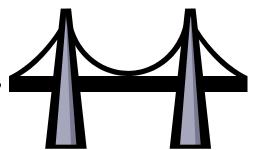
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Improving Data Resources

- Data Infrastructure = Roads for the new car to move on
 - "Roads" built now = infrastructure for the future (a bridge)
 - Accommodates "CompTox data" being included in Risk Assessments

- Existing Data
- Improved Methods
- CompTox Data



Risk Assessment

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Why Do We?

• Re-invent the wheel each time an assessment is done



- Time-intensive
- Resource-intensive
- Similar inputs go into developing risk assessments
 - Regardless of agency
 - Regardless of purpose

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Why Not?

- Instead of re-inventing, improve
 - More work on improved methods and analysis
 - Less on routine "up-front" work
- Start-out where the last person left off
 - A relay race instead of a marathon
 - Increased Interagency cooperation



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Shouldn't We?

Constitute an Interagency
Information-sharing Resource
to Expedite Development
of Risk Assessments
Using Sound Science.

If so, the time is NOW.

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A Shared Data Resource Will:

- Reduce redundancy
- Encourage use of advanced analysis
- Expedite risk assessment development
- Effectively use limited resources

- **And** -

Will pave the way for use of CompTox in Risk Assessment

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Our Discussion Today

- Scientific Data in Regulatory Decisions
- ATSDR Experience
- Distributed Database Approach
- NIEHS Data Structure Supporting Computational Toxicology
- Wrap-up and Open Discussion
- Related Sessions